



IXW/AF
Xerox Docket No. D/A1203

PATENT APPLICATION

THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE HONORABLE BOARD OF PATENT APPEALS AND INTERFERENCES

In re the Application of

Pinyen LIN et al.

On Appeal from Group: 2675

Application No.: 09/683,547

Examiner: S. Kumar

Filed: January 16, 2002

Docket No.: 109128

For: SPACER LAYER FOR ELECTROPHORETIC DISPLAY DEVICE

APPEAL BRIEF TRANSMITTAL

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Attached hereto is our Brief on Appeal in the above-identified application.

The Commissioner is hereby authorized to charge Deposit Account No. 24-0037 in the amount of Five Hundred Dollars (\$500.00) in payment of the Brief fee under 37 C.F.R. 1.17(f). In the event of any underpayment or overpayment, please debit or credit our Deposit Account No. 24-0037 as needed in order to effect proper filing of this Brief.

For the convenience of the Finance Division, two additional copies of this transmittal letter are attached.

Respectfully submitted,

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I. REAL PARTY IN INTEREST

The real party in interest for this appeal and the present application is Xerox Corporation, by way of an Assignment recorded in the U.S. Patent and Trademark Office at Reel 12311, Frame 154.

II. STATEMENT OF RELATED APPEALS AND INTERFERENCES

There are no prior or pending appeals, interferences or judicial proceedings, known to Appellant, Appellant's representative, or the Assignee, that may be related to, or which will directly affect or be directly affected by or have a bearing upon the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

Claims 1, 2, 4-9 and 11-27 are on appeal.

Claims 1, 2, 4-9 and 11-27 are pending.

Claims 1, 2, 4-9 and 11-27 are rejected. No claims are allowed.

Claims 3 and 10 are canceled.

IV. STATUS OF AMENDMENTS

No Amendment After Final Rejection has been filed. A Request for Reconsideration was filed on January 7, 2005. In a June 17, 2005 Advisory Action, the Examiner indicated that the Request for Reconsideration did not place the application in condition for allowance.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The claimed subject matter is directed to an electrophoretic display, also commonly referred to as electric or electronic paper. As explained at paragraph [0002] of the specification, electrophoretic displays generally comprise a suspension of charged pigment particles colloidally dispersed in a liquid of matching specific gravity contained in a cell comprising two parallel and transparent conducting electrode panels. The charged particles are transported between the electrode panels under the influence of an electric field, and can therefore be made to display an image through appropriate application of the electric field on the electrodes.

An electrophoretic display illustrating the claimed subject matter is illustrated in Fig. 1. As shown, the electrophoretic display device comprises two conductive film substrates 10 and 20 disposed oppositely of each other. Between the conductive film substrates are contained a multiplicity of individual reservoirs (30, 31, 32), each filled with a display liquid (in this illustrated case, containing two differently colored particles in a liquid). Each of the individual reservoirs defines one cell of the electrophoretic display device. Segregating portions of a spacer layer 40 keep the individual reservoirs separate from one another. See paragraph [0023].

As explained at paragraphs [0061] to [0071], the display fluid is comprised of at least one set of colored particles dispersed in at least one liquid system. For example, in one embodiment, the electrophoretic display fluid comprises one set of particles dispersed in a colored liquid system, the particles exhibiting different, contrasting color to the color of the liquid. In another embodiment, the electrophoretic display fluid comprises two sets of particles dispersed in a preferably transparent liquid system (although it may be useful to also color/tint the liquid system), the two sets of particles exhibiting different, contrasting color and different charging properties from each other.

Images may be developed with the electrophoretic display device by applying an electric field to the reservoirs through the conductive film substrates 10, 20 so that the reservoir displays the desired color. Each reservoir may be individually addressable. Thus, for example, in a device using two particles of opposite charge and visually contrasting colors, the device and particles can be designed such that a positive electric field orients the first set of color particles (for example, white) at the top of the display device, thus displaying the color of the first set of particles, while a negative electric field orients the second set of color particles (for example, black) at the top of the display device in order to display the color of the second set of particles. In this manner, an image can be developed with the device. Paragraph [0072].

A. Independent Claim 1

Independent claim 1 is directed to an electrophoretic display device (paragraph [0023] and Fig. 1) comprising a spacer layer (40 in Fig. 1 (paragraph [0023])) sandwiched between two conductive film substrates (10, 20 in Fig. 1 (paragraph [0023])), at least one of which is transparent (paragraph [0027]). The spacer layer defines a multiplicity of individual reservoirs within the display device, each of the individual reservoirs being filled with a display liquid (30, 31 and 32 in Fig. 1 (paragraph [0023]), 75 in Fig. 4 (paragraph [0039]) and 145, 146 in Figs. 6 and 7 (paragraph [0046])). The spacer layer of claim 1 comprises at least one pocket sheeting layer (70 in Fig. 4 (paragraph [0039])) comprised of at least two sheets joined together (115, 116 in Fig. 5 (paragraphs [0040 and 0041])) and containing a pattern of pockets within the joined sheets, the pockets defining the individual reservoirs (75 in Fig. 4 (paragraph [0039]), 145, 146 in Figs. 6 and 7 (paragraph [0046]), and Fig. 8 (paragraph [0049])).

Embodiments of claim 1 are best illustrated in Figs. 4-8 of the specification, and described at paragraphs [0039] to [0051]. Here, it is described and shown that the spacer

layer is comprised of two sheets (for example, sheets 115 and 116 in Fig. 5) that are joined together and contain a pattern of pockets within and between the two sheets, in which the pockets define the individual reservoirs. As noted in paragraph [0041], the spacer layer is modeled after bubble wrap, but with a manufacturing process modification in which the bubbles are filled with the display liquid instead of air.

An advantage to using pocket spacer layers is that two separate spacer layers each containing a differently colored display liquid may be manufactured and combined, which is particularly useful for color applications. Two differently colored display liquid sheets 135 and 136 are shown in Figs. 6 and 7. The patterns on each of the respective sheets are set such that when one of the sheets is inverted and placed upon the other sheet, a composite pocket spacer layer 150 is formed with two sets of patterned pockets containing the differently colored display fluids. It is similarly possible to combine three, four, etc., color spacer layers together to achieve composite multi-color spacer structures. For example, assembling two two-color layers 205, 215 together can make a four-color spacer layer 225 as shown in Fig. 8.

B. Independent Claim 6 and Dependent Claims 7-9 and 18-20

Independent claim 6 is directed to an electrophoretic display device (paragraph [0023] and Fig. 1) comprising a spacer layer (40 in Fig. 1 (paragraph [0023])) sandwiched between two conductive film substrates (10, 20 in Fig. 1 (paragraph [0023])), at least one of which is transparent (paragraph [0027]). The spacer layer defines a multiplicity of individual reservoirs within the display device, each of the individual reservoirs being filled with a display liquid (30, 31 and 32 in Fig. 1 (paragraph [0023]), 75 in Fig. 4 (paragraph [0039]) and 145, 146 in Figs. 6 and 7 (paragraph [0046])). The spacer layer here is selected from the group consisting of:

(a) a screen comprised of fibers in which holes within the screen define the individual reservoirs (Fig. 2, paragraphs [0031] to [0034]) (see also dependent claims 7 and 8);

(b) a laser punched spacer layer comprised of a laser ablatable material in a form of a sheet having holes laser punched therein and in which the laser punched holes define the individual reservoirs (Fig. 3, paragraph [0035] to [0038]) (see also dependent claim 9);

(c) an etched photoresist layer comprised of a photoresist material, formed upon one of the conductive film substrates, having a plurality of openings etched through the photoresist material, and in which the plurality of openings etched in the photoresist material define the individual reservoirs (Fig. 9, paragraphs [0052] to [0055]) (see also dependent claim 18); and

(d) a composite etched layer comprised of a composite of two photoresist layers each comprised of a photoresist material sandwiching a conductive film and in which holes etched through the composite define the individual reservoirs (Figs. 10-13, paragraphs [0056] to [0058]) (see also dependent claims 19 and 20).

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

The following grounds of rejection are presented for review:

Claims 1, 2, 4-9 and 11-27 are rejected as having been obvious under 35 U.S.C. §103(a) over U.S. Patent No. 6,445,489 (Jacobson) in view of U.S. Patent No. 3,668,106 (Ota), and further in view of U.S. Patent No. 6,222,513 (Howard).

VII. ARGUMENT

A. Introduction

Appellants respectfully submit that none of the spacer layer embodiments recited in the claims are taught or suggested by Jacobson, Ota or Howard, alone or in combination. Mainly, none of Jacobson, Ota or Howard, individually or together, teaches or suggests an electrophoretic display including a spacer layer of:

- (1) a pocket sheeting layer comprised of at least two sheets joined together and containing a pattern of pockets within the joined sheets, the pockets defining the individual reservoirs (claim 1);
- (2) a screen comprised of fibers in which holes within the screen define the individual reservoirs (claims 6, 7 and 8);
- (3) a laser punched spacer layer comprised of a laser ablatable material in a form of a sheet having holes laser punched therein and in which the laser punched holes define the individual reservoirs (claims 6 and 9);
- (4) an etched photoresist layer comprised of a photoresist material, formed upon one of the conductive film substrates, having a plurality of openings etched through the photoresist material, and in which the plurality of openings etched in the photoresist material define the individual reservoirs (claims 6 and 18); and
- (5) a composite etched layer comprised of a composite of two photoresist layers each comprised of a photoresist material sandwiching a conductive film and in which holes etched through the composite define the individual reservoirs (claims 6, 19 and 20).

Each of these spacer layer embodiments is separately patentable over the cited references, and thus each of the claims above is separately argued.

B. Jacobson Does not Teach or Suggest the Electrophoretic Display of Claims 1 and 6 Having a Spacer Layer Between Two Conductive Films

Jacobson describes an electrophoretic display that includes light-emitting layer 10, a photoconductive layer 12 and an electrophoretic layer 14. See the Abstract and Fig. 1.

The Examiner has repeatedly asserted that Fig. 9 of Jacobson describes an electrophoretic display device that includes a spacer layer 62 sandwiched between two conductive film substrates, at least one of which is transparent. Appellants respectfully disagree with this characterization of Jacobson.

Jacobson's Fig. 9 shows a display in which an external paper document 64 is used to generate an image. The display 58 includes, from bottom to top, paper document 64, light diffuser 62, fenestrated light-emitting layer 60, photoconductive layer 12, electrophoretic layer 14, and clear top electrode 16. A voltage source 18 is connected between the photoconductive layer 12 and the clear top electrode 16. Jacobson also describes that the light diffuser 62 may be embodied as a clear spacer. See col. 10, line 52 to col. 11, line 12.

Jacobson does not teach or suggest an electrophoretic display wherein a spacer layer is sandwiched between two conductive film substrates as required in claims 1 and 6. While Jacobson indicates that the light diffuser 62 may be a clear spacer layer in Fig. 9, such does not teach or suggest the electrophoretic display device of claim 1. Layer 62 in Jacobson's Fig. 9, even if a clear spacer, would not be between two conductive film substrates as required for the electrophoretic display device of present claim 1. In Fig. 9, the voltage source is shown to be connected with the clear top electrode layer 16 and the photoconductive layer 12. These layers 12 and 16 are thus the conductive layers of the Fig. 9 device. These conductive layers 12 and 16 sandwich only electrophoretic layer 14, and do not sandwich layer 62.

In Jacobson, layer 62 serves a completely different purpose from the spacer layer of claims 1 and 6. In Jacobson, layer 62 is used to physically space the paper document 64 away

from the display. In present claims 1 and 6, a spacer layer is used to segregate portions of the electrophoretic display layer so as to create individual display fluid units within the device. Layer 62 in Jacobson is not a part of the electrophoretic layer, and in fact is shown completely separate therefrom. One would not have found it obvious to use the physical spacer 62 of Jacobson in an electrophoretic layer for the very different purpose of segregating portions of the electrophoretic layer as in claims 1 and 6.

C. Ota and Howard do not Remedy the Deficiencies of Jacobson

The Examiner turned to Ota as allegedly suggesting replacing spacer layer 62 in Jacobson's Fig. 9 with a different spacer such as described in Ota. The Examiner then further turned to Howard as allegedly suggesting the specific structures of the spacer layer as recited in claims 1 and 6. Appellants respectfully submit that even if the references were to have been combined as alleged by the Examiner, the subject matter of claims 1 and 6 still would not have been achieved.

1. All Claims

The Examiner acknowledged that Jacobson does not teach or suggest any of the spacer layer structures recited in claims 1 and 6, and turned to Ota and Howard as allegedly remedying this deficiency. However, even if Jacobson's spacer layer 62 in Fig. 9 were to have been replaced with a different spacer structure, the electrophoretic display device of claims 1 and 6 still would not have been achieved. As was discussed extensively above, the resulting structure would still not have the spacer layer sandwiched between two conductive film substrates as required in claims 1 and 6.

2. Claim 1

The combined teachings of Jacobson, Ota and Howard also fail to teach or suggest the electrophoretic display device of claim 1 wherein the spacer layer comprises at least one

pocket sheeting layer comprised of at least two sheets joined together and containing a pattern of pockets within the joined sheets, and wherein the pockets define the individual reservoirs.

Ota describes an electrophoretic display device. See the Abstract. In Figs. 12a-12c and 13, described at col. 10, lines 7-51, Ota describes a device including a sheet 41 with multiple holes 42 therein that define separate suspension units for the display liquid in the electrophoretic suspension layer 22. The sheet is best shown in Fig. 13 as comprising a single sheet with multiple holes 42 therein.

Such a sheet 41 with holes 42 therein clearly fails to teach or suggest a spacer layer comprising at least one pocket sheeting layer comprised of at least two sheets joined together and containing a pattern of pockets within the joined sheets, each of the pockets being filled with a display liquid, as required in claim 1. Ota thus does not teach or suggest the spacer layer recited in claim 1.

The Examiner alleged that Howard describes a spacer layer at column 3, lines 45-62 and in Fig. 3 comprised of two sheets joined together and containing a pattern of pockets of individual reservoirs therein. Appellants submit that this characterization of Howard is not accurate. Howard is directed to a completely different type of display, and moreover does not teach or suggest a spacer layer comprising at least one pocket sheeting layer comprised of at least two sheets joined together and containing a pattern of pockets within the joined sheets, each of the pockets being filled with a display liquid, as required in claim 1.

Howard describes an electric paper sheet including a sheet 300 having cavities that are each filled with one bichromal sphere (i.e., a sphere having two colors, one on each half of the sphere), the sheet 300 having on each side an encapsulating layer 302, 304, at least one of which includes thereon charge-retaining islands 306. See Fig. 3.

One of ordinary skill in the art would not have turned to the teachings of Howard with respect to the teachings of Jacobson and Ota. This is because Howard describes a display

device employing bichromal gyricon spheres (i.e., a twisting ball display). As is clear from Howard, it is known that in such devices, the balls must each be loaded into an individual cavity in which the ball can spin to display one of its two colors to the viewer. The cavities shape must be strictly controlled such that the ball is free to spin within the cavity, but is not free to substantially move (e.g., laterally or vertically) within the cavity. Such displays are formed by, for example, loading the balls into a thin polymer sheet, and then allowing the sheet to absorb a material such as plasticizer that allows the polymer to slightly expand around each of the balls. See, for example, U.S. Patent No. 4,143,103 (Appendix B). These single sheets containing twisting gyricon balls therein are quite different from, and operate quite differently from, the electrophoretic display such as described in Jacobson and Ota.

As such, one of ordinary skill in the art would not have looked to Howard relative to the teachings of Jacobson. Further, one of ordinary skill in the art looking for spacers similar to Ota would also not have turned to Howard. The Examiner's alleged basis for the combination of Ota and Howard, i.e., to achieve improved grey scale, highlight color and full color, is a function of the use of twisting balls in Howard, and would not be achieved in Ota merely by attempting to use the cavity-containing sheet of Howard (presumably absent the twisting balls) as the spacer in Ota. Thus, these teachings of Howard would not have motivated one to have made the combination.

Even if one had turned to the teachings of Howard, such teachings would not have led one to the electrophoretic display of claim 1. As clear from Howard's Fig. 3 and the additional side profiles of Figs. 6 and 7, the sheet 300 having the cavities that house the bichromal gyricon spheres in Howard is a single sheet. The cavities are not formed through joining two sheets together as in the electrophoretic display device of claim 1. The Examiner's allegation that Howard describes a spacing layer formed from two joined sheets is not accurate. Howard does not teach or suggest the spacer layer required in claim 1.

Finally, it is not seen how one of ordinary skill in the art could use the cavity-containing sheet 300 of Howard in the display device of Ota or Jacobson. In particular, Ota uses a colored liquid within the cavities of the spacer. See column 3, lines 40-50 of Ota. The cavity-containing sheet of Howard is made with twisting balls therein as discussed above, which balls support formation of the cavity. It is not seen how the balls could be removed from the sheet of Howard and/or how the fluid of Ota could be inserted in the sheet cavities. As seen in Howard, the cavities are not open to the outside of the single sheet they are in, and are thus not accessible for insertion of a fluid therein. Again, this is why the spacer of present claim 1 is required to be made of two sheets joined together, unlike Howard, so that the display fluid can be inserted into the pockets during formation of the spacer.

For all the foregoing reasons, Applicants submit that the teachings of Jacobson, Ota and Howard would not have led one to present claim 1, or claims dependent therefrom.

3. Claims 6-9 and 18-20

The combined teachings of Jacobson, Ota and Howard also fail to teach or suggest the electrophoretic display device of claim 6 and dependent claims 7-9 and 18-20, wherein the spacer layer is selected from the group consisting of:

(a) a screen comprised of fibers in which holes within the screen define the individual reservoirs (claims 6-8);

(b) a laser punched spacer comprised of a laser ablatable material in the form of a sheet having holes laser punched therein (claims 6 and 9);

(c) an etched photoresist layer comprised of a photoresist material, formed upon one of the conductive film substrates, and having a plurality of openings etched through the photoresist material (claims 6 and 18); and

(d) a composite etched layer comprised of a composite of two photoresist layers each comprised of a photoresist material that sandwich a conductive film with holes etched through the composite (claims 6 and 19-20).

Ota does not teach or suggest any of these recited structures for a spacer layer that defines a multiplicity of reservoirs completely separated from each other. At col. 10, lines 14-21, Ota merely indicates that such a spacer layer may be comprised of a sheet with holes in it, but such vague teaching would not have led one of ordinary skill in the art to any of the four different specific spacer layer structures recited in claims 6-9 and 18-20.

With particular respect to claims 6-8, Ota does mention a screen layer at col. 7, lines 14-31, with reference to Fig. 8b. Here, however, Ota is describing a layer merely intended to separate (physically space apart) the two housing walls 31 and 32 of the display. As shown in Fig. 8b, the screen is porous (col. 7, line 25), and does not define individual reservoirs within the display device that are completely separated from each other as required in claim 6. This screen is thus completely different from the reservoir defining spacer described at col. 10 of Ota and recited in the present claims.

Regarding Howard, here again one of ordinary skill in the art would not have turned to the teachings of Howard for all the reasons discussed above.

Even if one would have turned to the teachings of Howard, such teachings would not have led one to use spacer layers having the structures recited in claims 6-9 and 18-20. Howard, like Ota, also does not describe the specific spacer layer structures recited in claims 6-9 and 18-20.

The Examiner has cited to col. 6, lines 42-63 of Howard. Here, Howard describes how the charge-retaining islands 306, separated by channels 303 (see Fig. 3), may be formed on the encapsulating layers. This description in Howard thus does not even relate to forming a spacer layer. The methods described here in Howard merely describe forming charge-

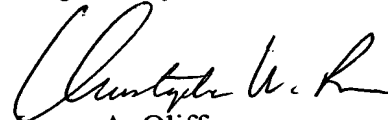
retaining islands upon a surface. Nothing here would have led one to any of the spacer layer structures recited in claims 6-9 and 18-20.

For all the foregoing reasons, Applicants submit that the teachings of Jacobson, Ota and Howard also would not have led one to claims 6-9 and 18-20.

VIII. CONCLUSION

For all of the reasons discussed above, it is respectfully submitted that the rejections are in error and that claims 1, 2, 4-9 and 11-27 are in condition for allowance. For all of the above reasons, Appellants respectfully request this Honorable Board to reverse the rejections of claims 1, 2, 4-9 and 11-27.

Respectfully submitted,



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APPENDIX A - CLAIMS APPENDIX

CLAIMS INVOLVED IN THE APPEAL:

1. An electrophoretic display device comprising a spacer layer sandwiched between two conductive film substrates, at least one of which is transparent, the spacer layer defining a multiplicity of individual reservoirs within the display device, each of the individual reservoirs being filled with a display liquid, wherein the spacer layer comprises at least one pocket sheeting layer comprised of at least two sheets joined together and containing a pattern of pockets within the joined sheets, and wherein the pockets define the individual reservoirs.

2. The electrophoretic display device according to claim 1, wherein each of the multiplicity of individual reservoirs has a width of about 5 microns to about 200 microns.

3. (Canceled).

4. The electrophoretic display device according to claim 1, wherein the display liquid has a color and contains one set of particles with a different, contrasting color from the color of the colored display liquid.

5. The electrophoretic display device according to claim 1, wherein the display liquid is transparent and contains at least two sets of particles with different, contrasting color to each other.

6. An electrophoretic display device comprising a spacer layer sandwiched between two conductive film substrates, at least one of which is transparent, the spacer layer defining a multiplicity of individual reservoirs within the display device that are completely separated from each other, each of the individual reservoirs being filled with a display liquid, wherein the spacer layer is selected from the group consisting of (a) a screen comprised of fibers in which holes within the screen define the individual reservoirs, (b) a laser punched spacer layer comprised of a laser ablatable material in a form of a sheet having holes laser

punched therein and in which the laser punched holes define the individual reservoirs, (c) an etched photoresist layer comprised of a photoresist material, formed upon one of the conductive film substrates, having a plurality of openings etched through the photoresist material, and in which the plurality of openings etched in the photoresist material define the individual reservoirs, and (d) a composite etched layer comprised of a composite of two photoresist layers each comprised of a photoresist material sandwiching a conductive film and in which holes etched through the composite define the individual reservoirs.

7. The electrophoretic display device according to claim 6, wherein the spacer layer is the screen.

8. The electrophoretic display device according to claim 7, wherein the screen is comprised of woven fibers, which have been flattened and fused at fiber joints.

9. The electrophoretic display device according to claim 6, wherein the spacer layer is the laser punched spacer layer.

10. (Canceled).

11. The electrophoretic display device according to claim 1, wherein the pockets of the pocket sheeting layer are formed by dimples in one of the at least two sheets.

12. The electrophoretic display device according to claim 1, wherein the spacer layer comprises a composite comprised of a first pocket sheeting layer in which pockets are filled with a display liquid exhibiting a first color and a second pocket sheeting layer in which pockets are filled with a display liquid exhibiting a second color different from the first color, wherein the first pocket sheeting layer and the second pocket sheeting layer are placed together such that the pockets in the first and second pocket sheeting layers of the composite are substantially free of overlap at least in a direction perpendicular to a plane in which the pocket sheeting layers lie when the first and second pocket sheeting layers are placed together.

13. The electrophoretic display device according to claim 12, wherein the first color is black and the second color is an additional color.

14. The electrophoretic display device according to claim 1, wherein the spacer layer comprises a composite of three pocket sheeting layers, each pocket sheeting layer having pockets thereof filled with a display liquid exhibiting a different color from color exhibited by the other pocket sheeting layers, wherein the three pocket sheeting layers are placed together such that the pockets in the three pocket sheeting layers of the composite are substantially free of overlap at least in a direction perpendicular to a plane in which the pocket sheeting layers lie when the three pocket sheeting layers are placed together.

15. The electrophoretic display device according to claim 14, wherein a first of the three pocket sheeting layers exhibits cyan color, a second of the three pocket sheeting layers exhibits magenta color and a third of the three pocket sheeting layers exhibits yellow color.

16. The electrophoretic display device according to claim 1, wherein the spacer layer comprises a composite of four pocket sheeting layers, each of the four pocket sheeting layers having pockets thereof filled with a display liquid exhibiting a different color from color exhibited by the other pocket sheeting layers, wherein the four pocket sheeting layers are placed together such that the pockets in the four pocket sheeting layers of the composite are substantially free of overlap at least in a direction perpendicular to a plane in which the pocket sheeting layers lie when the four pocket sheeting layers are placed together.

17. The electrophoretic display device according to claim 16, wherein a first of the four pocket sheeting layers exhibits cyan, a second of the four pocket sheeting layers exhibits magenta, a third of the four pocket sheeting layers exhibits yellow and a fourth of the four pocket sheeting layers exhibits black.

18. The electrophoretic display device according to claim 6, wherein the spacer layer is the etched photoresist layer.

19. The electrophoretic display device according to claim 6, wherein the spacer layer is the composite etched layer.

20. The electrophoretic display device according to claim 19, wherein the conductive film of the composite etched layer is a metal.

21. The electrophoretic display device according to claim 6, wherein each of the multiplicity of individual reservoirs has a width of about 5 microns to about 200 microns.

22. The electrophoretic display device according to claim 6, wherein the spacer layer includes solid partition portions separating the individual reservoirs, the solid partition portions having thicknesses of from about 10 to about 100 microns.

23. The electrophoretic display device according to claim 6, wherein the device further includes a conductive path on a bottom surface of one of the conductive film substrates in a pattern such that each of the individual reservoirs are separately addressable with an electric field.

24. The electrophoretic display device according to claim 6, wherein the transparent conductive film substrate comprises a film of polyethylene terephthalate coated with indium tin oxide.

25. The electrophoretic display device according to claim 6, wherein the transparent conductive film substrate comprises a film of polyethylene terephthalate coated with silver.

26. The electrophoretic display device according to claim 12, wherein the first pocket sheeting layer further includes pockets therein filled with a display liquid exhibiting a third color different from the first color.

27. The electrophoretic display device according to claim 26, wherein the second pocket sheeting layer further includes pockets therein filled with a display liquid exhibiting a fourth color different from the second color.

APPENDIX B - EVIDENCE APPENDIX

A copy of each of the following items of evidence relied on by the Appellants is attached:

U.S. Patent No. 4,143,103 (Sheridon)

The evidence was referenced by the Appellants in the January 7, 2005 Request for Reconsideration, and again in this Appeal Brief.

APPENDIX C - RELATED PROCEEDINGS APPENDIX

Copies of relevant decisions in the following related proceedings are attached:

NONE